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# DMF NEWS

Volume 20

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## DMF Studies Scaled-back Dogfish Fishery

This past summer DMF devoted time and resources to sample spiny dogfish commercial fishery catches and landings. We made a commitment to do this sampling as part of our management approach for the dogfish fishery in state waters this year.

DMF and the Massachusetts Marine Fisheries Commission provided for a 7 million lbs. dogfish fishery to preserve some of the Commonwealth's dogfish processing infrastructure and markets that would have been lost entirely and for almost 20 years under new federal restrictions. We set this limit after examining other options to a complete closure and finding one that would provide for a small-scale directed fishery. The fishery management councils' scientific/technical advisors (Dogfish Technical Committee) recently concluded our alternative is equivalent to the federal plan's stock rebuilding program.

Our approach for managing this fishery in state waters involved permit requirements, a 31" minimum size, no overnight setting of gillnets, restrictions on gillnet length and number of nets, and a 7,000 lbs. daily landing limit. For the past decade dogfish have been important to fishermen from ports of Scituate, Plymouth, and Chatham and fish processors in New Bedford.

DMF closed the fishery on August 26 after we projected that the 7 million lbs. would be landed by that date. The closure will last until the end of the management councils'

fishing year, April 30, 2001. Seven million lbs. is a far cry from recent year's landings of 45-50 million lbs. Yet, industry was able to sustain this very modest dogfish fishery because price per pound rose to about 25 cents from the usual 5 cents.

When we implemented our alternative, we pledged to use the directed fishery as an opportunity to obtain basic information about the fishery that could be used to improve stock assessments. Critical biological information for stock assessments, such as fish length and age data from fishermen's catches, is lacking. Biological sampling efforts for many species are declining throughout the region.

Currently, the stock assessment relies almost entirely on results from spring-time Northeast Fisheries Science Center bottom trawl surveys extending from North Carolina to the U.S./Canada border. The assessment also uses DMF's trawl survey of state waters. Federal estimates of fish abundance (biomass) are gauged from a swept-area approach involving the number and weight of dogfish "swept up" in the area covered by 20 minute trawls tows expanded upwards to the total square area of coastal and offshore ocean bottom over which dogfish roam. Dogfish are migratory seasonally moving up and down in the water column and along the coast with cross-over into Canadian waters.

Because very little is known about the sizes of dogfish landed and processed, DMF devoted staff to sampling

processing plants in New Bedford. This involved our having to temporarily assign some of our staff to do this important work. Even this author found himself along side a measuring board. Our task was made easier by processors anxious to help us obtain what we needed to better understand landings composition (length by sex) and to improve future stock assessments. They welcomed us and cooperated in every way.

On 13 occasions from July 17 through August 9 we sampled New Bedford processing plants. About 13,000 lbs. were sampled and 2,800 fish measured. Sizes of dogfish ranged from about 67-104 cm (26-41 inches).

In addition to our port sampling, DMF observers sampled fishermen's catches at sea. Eight trips were made on dogfish longliners and gillnetters fishing in Cape Cod Bay and east of Cape Cod within the 3-mile limit. Catch and by-catch composition, and dogfish size distribution were documented. Like the processors, vessel captains were very helpful.

A report of our sampling activities and results will soon be released. The results will be forwarded to scientists, the management councils and the Atlantic States Marine Fisheries Commission (ASMFC). ASMFC is developing an interstate management plan for dogfish. A plan for federal waters already exists.

One argument for our continuing a small-scale directed fishery is it provides the means by which we can better assess dogfish abundance – the status of the stock. Assuming we have a similar fishery next year, we intend to continue and perhaps expand our sampling and enlist other states to do the same. Even some members of the industry have offered to pay for research and to involve fishermen and processors in the data-gathering. To us it's clear there's much to be gained for cooperative work with fishermen. It's our intent to work with the industry to better understand the impact of the fishery on the resource and to respond with appropriate restrictions.

*By David Pierce, Ph.D., Assistant Director*



***DMF's Brian Kelly (above) and other staff monitored dogfish catches at-sea and in processing plants throughout the summer.***



## **DMF biologist joins NMFS & fishermen in monkfish survey on the edge of the Continental Shelf**

DMF biologist Jeremy King sailed with federal scientists aboard a New Bedford trawler F/V Warrior, in early October on a cooperative monkfish research survey. This trip was designed to compare the commercial vessel's catches with recent catches in the same area by the NMFS research vessel and to conduct tows in waters deeper than those sampled by NMFS. Monkfish range from shallow waters to very deep waters of the offshore canyons, and some in the industry have hoped to document an untapped abundance off the edge of the shelf.

Along with King were three NMFS scientists from the Northeast Fisheries Science Center, a graduate student from Rutgers University and a four member fishing crew. The six-day trip covered areas along the continental shelf ranging from south of Nantucket to Hudson Canyon, off New York.

Monkfish, also known as goosefish, range in U. S. waters from the Gulf of Maine to Cape Hatteras. They are fished commercially by otter trawls, scallop dredges and gill nets. Reported landings of monkfish have steadily increased from an annual average of 5,000,000 lbs. in the 1980s to 50,000,000 lbs. in the 1990s. Once considered an "underutilized" species, monkfish are now considered overfished. Fishermen from the Mid-Atlantic to Maine are faced with new restrictions under a Monkfish Fishery Management Plan.

NMFS bottom trawl surveys have indicated declining biomass of monkfish since the mid-1980s and a decrease in catches of large monkfish. Since the mid 1990s both fishing effort and commercial landings of monkfish from depths greater than 200 fathoms have increased. Although the NMFS survey generally covers the area in which the fishery operates, a portion of the stock, may be inadequately covered by the standard seasonal surveys.

The pilot survey set out to fish on certain sites recently sampled by the NMFS autumn bottom trawl survey as well as at sites in depths greater than undertaken by the NMFS survey. Four transects, each with stations assigned at 50 fathom depth intervals, from various depths down to 350 fm (or less where circumstances prevented towing) were completed. The Warrior was equipped with a net that differed considerably from the standard bottom trawl survey net. The net was larger, entirely constructed of large mesh, and fished closer to the bottom. At each completed station,

the catch was sorted by species. Each species was weighed in total and the individual fish were measured.

The scientists removed vertebrae and a fin ray from a sample of monkfish from each catch to be used for determining the age-at-length. The sex, state of maturity and stomach contents were also recorded. In addition, tissue samples were collected for a stock identification study. Monkfish less than 30 cm were frozen and approximately 100 fish greater than 30 cm had gonad and liver weights recorded for studies being undertaken at Rutgers University.

Thirty-four stations were completed successfully in five and one half days. Observations on deck revealed that the monkfish catches of the Warrior exceeded those by the recently completed NMFS trawl survey. This was no surprise due to the larger commercial net designed for efficiently catching monkfish. The larger sample sizes caught by the Warrior will improve scientists' characterization of the length and age frequency of the population in the sampling area. Although this pilot study was limited in scope, the potential is clear for developing a cooperative survey designed to efficiently sample a single species. Increased sample sizes may lead to better assessments. Moreover, fishing industry participation may lead to greater understanding and acceptance of the results.



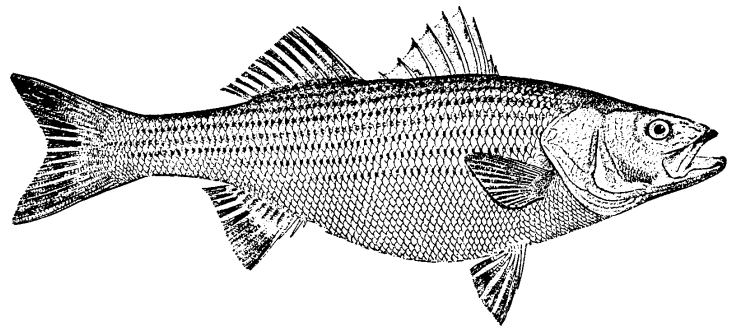
*DMF file photos.*

## New bass assessment reverses last year's "overfished" status

### ***Plan addendum public hearings expected in 2001***

The Atlantic States Marine Fisheries Commission Striped Bass Management Board recently initiated development of Draft Addendum V to the Interstate Fishery Management Plan (FMP) for Atlantic Striped Bass. The Draft Addendum will provide options for states to either maintain their current striped bass fishery regulations or implement regulations similar to those in 1998-1999 for 2001, and possibly 2002.

The latest stock assessment shows different results from last year's. The 1998 and 1999 estimates of fishing mortality are now considered essentially equal to the targets in the FMP. (Previous assessments suggested overfishing was occurring on older age classes.) When the Board adopted Addendum IV, its intent was to safeguard age 8 and older fish from disproportionate fishing mortality for at least two years, while it prepared Amendment 6 to the FMP. The states are now in a position where no additional reductions in harvest are required during 2001. In fact, the states may



be able to implement more liberal management measures such as those that were in place in 1998/1999.

Currently, striped bass is managed through Addendum IV to the FMP, which required states to implement at least a 14 percent reduction in fishing mortality on age 8 and older fish for 2000. Additionally, Addendum IV stipulated that states would have to implement additional restrictions in 2001 if the target fishing mortality rate on older fish had not been met in 2000. The Addendum did not account for the possibility that the estimates of 1998 fishing mortality would be substantially reduced as indicated by the latest stock assessment report.

The Draft Addendum will present a series of striped bass management options for 2001, and possibly 2002. These options include requiring the states to implement management measures that are equivalent to the 1998/1999 measures or retain their current management measures. The Draft Addendum also presents the option to implement these measures for one or two years (2001/2002).

The Board also reiterated its commitment to developing Amendment 6 with the goal of ensuring equity among user groups and the continued health of the striped bass resource. In June, the Board reviewed the comments received from state public information meetings that were held in late spring. Currently, the Striped Bass Plan Development Team and Technical Committee are finalizing the Public Hearing Draft of Amendment 6. A series of public hearings will be scheduled when the document is completed.

The Massachusetts' delegation on the Striped Bass Policy Board did not support the motion to develop Addendum V. While it provides an administrative band-aid for striped bass management next year, it constitutes an unnecessary "knee-jerk" reaction to normal year-to-year fluctuations in resource assessment information- similar to what occurred last year with adoption of Addendum IV. Since Addendum V gives states the option of reverting back to 1998/1999 regulations or maintaining 2000 regulations, the 2001 array of rules among states may become even more diverse than it is today. Addendum V simply does not foster regulatory stability nor consistency, which is a key ingredient of a successful management program. Anglers have grown increasingly impatient with the inconsistent rules among states.

The Draft Addendum is available for public review and comment. Copies of the 1999 stock assessment and draft Addendum V can be obtained either by contacting Vanessa Jones, Administrative Assistant, at (202) 289-6400, or via the Commission's webpage on its NEWS page at [www.asmf.org](http://www.asmf.org). For more information, please contact Robert Beal, ASMFC Fisheries Management Plan Coordinator, at (202) 289-6400, ext. 318.

*by Director Paul Diodati with excerpted text from ASMFC press release*

## DMF's Arne Carr recognized as "Environmental Hero"

*Reprinted and excerpted with permission from the Falmouth Enterprise by Christine M. Ferullo*

Marine Biologist Arnold Carr of Monument Beach has been hailed as an "environmental hero" by some top government officials including Vice President Al Gore, Senator John Kerry, and Bob Durand, Secretary for the Massachusetts Executive Office of Environmental Affairs.

Mr. Carr, a biologist for the Massachusetts Division of Marine Fisheries (DMF), was selected as an "environmental hero" by the National Oceanic and Atmospheric Administration for his efforts to reduce the impact of fishing gear on the environment. He was just one of 68 individuals in the country to receive the honor.

In cooperation with Provincetown fisherman Captain Henry Souza and Daniel McKiernan of the state's Sea Sampling Program, Mr. Carr helped champion the use of the raised footrope trawl in the whiting fishery. Unlike traditional whiting trawls, which rest on the ocean bottom, the raised trawl enables fisherman to catch targeted fish, while conserving stocks of other fish that are heavily regulated due to over fishing.

In a letter to Mr. Carr, Senator Kerry, who nominated Mr. Carr for the award, wrote, "Your countless hours working with fishermen in developing the raised footrope trawl resulted in Massachusetts fishermen landing approximately 2.5 million pounds of whiting last fall from primarily closed areas. More importantly, fishermen were allowed in the closed areas because the total by-catch of flounder, cod and haddock was less than five percent. Approximately 25 vessels earned a third of their income last year participating in this fishery, a remarkable accomplishment."

Accompanying his letter was another from Vice President Al Gore who congratulated Mr. Carr for "helping to protect our nation's environment."

"I'm a little embarrassed by the award," the modest Mr. Carr said during an interview this week. "I think the award

should be shared. It was team work that did it - and we had great success," he said.

Mr. Carr has worked for the Division of Marine Fisheries for the past 35 years. During the last 20 years he has dedicated himself to conservation engineering - the reengineering of fishing gear so it is more selective and less detrimental to the environment. Mr. Carr began working on developing different types of nets in the early 1990s after federal regulations banned all small mesh trawling in areas where regulated species exceeded five percent of a total catch. Whiting fisheries were being closed because the bycatch of flounder, cod, haddock and other bottom dwellers being pulled in with traditional nets was too high.

During a profitable season, the whiting fishery in Cape Cod Bay could net a fisherman half of his/her annual income during a two to three month period. "It was a significant fishery and to have it shut down was a catastrophe," Mr. Carr said. Determined to save the fishery, Mr. Carr set out to develop a net that would reduce the bycatch. In his search, he stumbled across the raised footrope trawl in Europe.

"I saw the design used in Europe on a different type of fishery and considered it application here. I brought the design to the state and worked with Henry Souza, a very talented fisherman in Provincetown. He and I, plus a number of other people in the Division, put it together. Henry and I spearheaded it", Mr. Carr said.

The raised footrope trawl is a net designed to float about 16 inches off the ocean floor. It can be used to catch whiting, hake, and dogfish, while sharply reducing the impact on the seabed. Initially, the new trawl was used on just a few fishing boats. Over the course of several years, it has been successfully used on more than 25 vessels participating in the whiting fishery from Cape Cod to Maine.

"It's a real conservation win," Mr. Carr said.



*DMF's Arne Carr (center) discussed trawl design with U.S. Senator John Kerry (right) and commercial fisherman and NE Council member Bill Amaru (left) last year in Hyannis.*

## **Conservation Engineering Program awarded \$300,000 for gear research**

### **Over \$200,000 earmarked for cooperating fishermen**

Arne Carr and Michael Pol of DMF's Conservation Engineering Program are continuing their cutting-edge fishing gear research. They've received three new grants from the Northeast Consortium to work with local fishermen to test innovations, and they are indirectly involved in a fourth.

The Northeast Consortium ([www.northeastconsortium.org](http://www.northeastconsortium.org)) is a coalition of the Maine, New Hampshire, MIT and Woods Hole Sea Grant Programs. It was given \$2 million in federal funds to distribute for cooperative research between scientists and commercial fishermen. The goals of the funding included the development of selective fishing gear and programs to utilize commercial fishing vessels in oceanographic research. Following a competitive process where anyone could submit research ideas, ten research projects were funded. All of these research projects were developed in cooperation with commercial fishermen and use commercial vessels as research platforms. Approximately 70% of the funding will be paid to fishermen for sea-time, net building, and other activities. The following projects were also originally part of the Massachusetts Fisheries Recovery Commission's Fisheries Research Strategic Plan.

#### **• Testing of Low-Profile Low Cod-Bycatch Gillnets**

Robert MacKinnon, a commercial fisherman from Scituate, has developed two gillnets that are designed to target flatfish while avoiding cod. He, Michael Pol, and Arne Carr have been awarded \$90,000 by the Northeast Consortium to test the cod-avoiding ability of these nets. On one net, the floatline is completely replaced by another leadline so that both the top and bottom of the net rest on the ocean bottom, with standard webbing floating in between. The dual leadline is the only difference between this net and standard gillnets. The second net to be tested has lead attached to the floatline every 30 feet to sink it to the bottom at set intervals. The catch from these two nets will be compared to a standard gillnet.

Both designs reduce the height of the nets underwater. Reducing the height of the nets may allow fishermen to catch flatfish, which stay very close to the bottom, and avoid cod, which tend to stay at least a short distance above the bottom. Also, lowering the height of the nets may reduce incidental takes of harbor porpoises.

Underwater cameras will be used to examine behavior of cod and flatfish near gillnets, in addition to gillnet sets that directly compare the catch of the two nets to the standard nets. Testing is planned for this winter aboard the *Lady Irene* off Scituate, and the *Sasquatch III* off Gloucester.

#### **• Groundfish Trawl nets Designed to Reduce the Bycatch of Cod**

Two trawl nets designed to catch flatfish and avoid cod will be tested. Luis Ribas, a leader among Provincetown commercial fisherman, has designed a trawl net with very large mesh openings all along the middle of the upper half of the net. The second net has been adapted by Arne Carr from a European net design that removes some of the webbing in the upper half of the net, moving the headrope as far back as practical. Both designs are based on the behavior of cod as they swim along in front of a trawl net. Underwater video shows that cod slowly rise as the net overtakes them. Placing

large mesh on the top of the net, or removing some of the webbing on top of the net, should allow cod to rise and escape. This project, awarded to Capt. Ribas, Arne Carr and Michael Pol, is budgeted at about \$100,000.

Sixteen days of gear testing are planned aboard the *Blue Skies* for this winter. Each net will be tested compared to a standard net, alternating nets every other tow.

The goal of this study and the gillnet study is to develop gear that allows fishermen to continue to trawl for flatfish without high discards of cod. Cod in the Gulf of Maine remains the most depleted of the commercially valuable groundfish species, and cod conservation is the driving force behind the restrictive closures.

#### **• Improving the Selectivity and Utility of Demersal Hook Fishing**

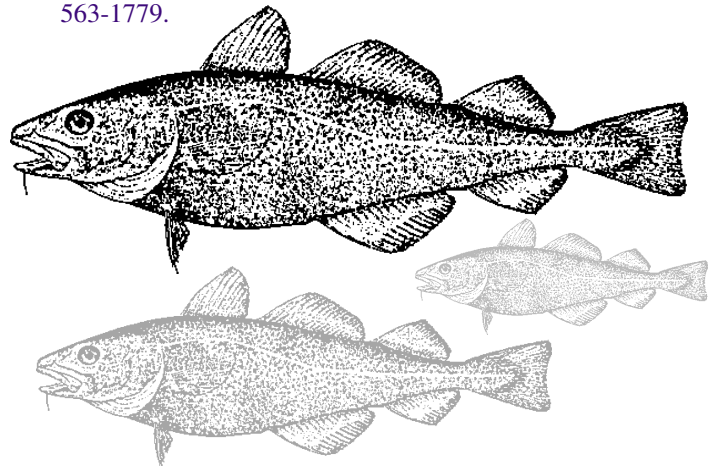
The Cape Cod Commercial Hook Fishermen's Association ([www.ccchfa.org](http://www.ccchfa.org)), working with Dr. Susan Goldhor of the Center for Applied Regional Studies (CARS), is participating with DMF to look at several aspects of bottom longlining. This project, funded for \$111,000, has four goals: examining feeding and hooking responses of cod, haddock, and yellowtail flounder; find gear and artificial bait combinations that minimize bycatch; determine if certain flatfish species can be caught with longline gear in commercial quantities; and educate local fishermen about the results of the study.

The first step in this project, slated for this fall, is capture and holding of live cod, haddock, and yellowtail. These fish will be exposed to artificial baits. Field-testing of effective baits is scheduled for the beginning of 2001.

#### **• A Collaborative Program to Reduce Bycatch and Discard in Gulf of Maine Otter Trawl Fisheries: Effect of Composite Mesh Codends on Trawl Selectivity**

Proctor Wells, a fisherman from Maine, and two prominent Massachusetts fishermen, Frank Mirarchi and Russell Sherman, have teamed with Dr. Chris Glass of the Manomet Center for Conservation Sciences to continue testing codends composed of diamond and square mesh openings. Previous work has indicated that composite codends can be used to limit sizes of flatfish and roundfish by separately adjusting the mesh sizes. DMF has collaborated with Manomet on a similar project in the past, and will continue to do so with this funding.

For more information on these projects, contact Arne Carr and Michael Pol at DMF's Pocasset Office at (508) 563-1779.



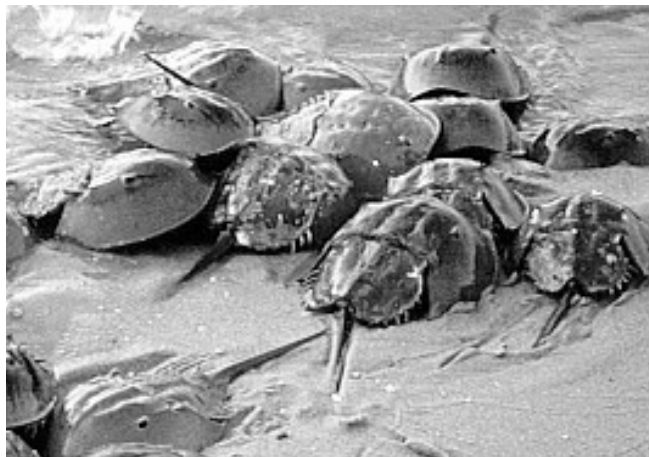
# Update on Horseshoe Crab Management

In a previous edition (see DMF News first quarter 2000) we discussed the recent shift in public opinion concerning the horseshoe crab, *Limulus polyphemus*, and its management under the aegis of the Atlantic States Marine Fisheries Commission (ASMFC). This species was previously considered an ancient oddity, destroyed in large numbers for shellfish predator control, large scale manufacturing of fertilizer and as bait for trapping conch and eels. However, its important role in the ecology of migratory shorebird populations, its unique importance in biomedical testing and concern over increasing harvest, particularly in Delaware Bay, as the demand for bait increases, has made it the object of a well-organized campaign by environmental organizations to reduce or eliminate commercial uses.

In response to this lobbying effort, several Atlantic coast governors took unilateral action to protect horseshoe crabs, and a majority of member states voted for the adoption of a fishery management plan by ASMFC. Even though there is no compelling evidence that Massachusetts horseshoe crabs migrate to other states, are overfished or critical to shorebird populations in the northeast, compliance with the plan is mandatory. Its main features are the licensing of harvesters and dealers, the collection of harvest statistics, the reduction in commercial harvest by each member state to at least 25% below reference period landings, survey and monitoring requirements, and studies to determine mortality associated with biomedical use and release.

Although DMF has no biological staff dedicated to the study and monitoring of horseshoe crabs, we have participated actively in the planning process and are presently in compliance with the mandatory provisions of the plan. This was accomplished by adding these duties to the Shellfish Sanitation Program under the supervision of Senior Biologist Frank Germano. Frank designed a reporting system based on existing catch reports for other fisheries, established relationships with dealers and fishermen, attended meetings of the ASMFC Technical Committee, and, with the help of area shellfish biologists, began to survey beaches at night to document spawning activity, and characterize the size composition and sex ratio of horseshoe crabs harvested for bait by sampling at dealerships. In all, a total of 78 spawning beaches were identified south of Plymouth. Of these, only 23 were harvested for bait, scientific or biomedical purposes. No bait harvest was reported north of the Cape Cod Canal. During the spring of 2001 we plan to continue surveying north of Cape Cod. Nearly 4000 horseshoe crabs were measured and sexed at dealerships to provide population parameters for regional assessments. The extent of this work was impressive, considering that no funding or staff were dedicated to this activity. It is encouraging to note that a majority of spawning areas, including the entire north and south shores, are not subject to fishing effort.

Although landings data are still being received and tallied, it is fairly certain that we will not reach or exceed the quota of 330,377 established by ASMFC for 2000. This is not indicative of decreased abundance, but is instead the result of a combination of factors that limited the harvest, including a daily catch limit, closed fishing days, cold and windy weather during the spawning period, and a severe lack of commercial freezer space caused by surplus cranberry production in 1999. In addition, the closure of Monomoy Island by the U.S. Fish and Wildlife Service and the National Seashore by the U.S. Park Service eliminated



*Photo courtesy of Tom O'Connell, Maryland DNR*

two of the most productive areas from the fishery. Although the Commonwealth is contesting the authority of these federal agencies to manage fisheries in the Territorial Waters of the Commonwealth, these closures are being enforced by them.

A single operation to supply crabs to Associates of Cape Cod for bleeding and release was licensed after a federal court decision granting injunctive relief to this previously licensed operation. Horseshoe crabs bled for biomedical use are presently not counted against the quota, and are released.

DMF is considering a different approach for 2001 in which all landings are counted against the quota, and releases would be optional. Our reasoning is that this approach would make the data more reliable, since there would be no need to separate the landings by category, which is extremely difficult. Including the bled crabs in the quota would enable their use as bait, potentially saving healthy crabs from exploitation. There would no longer be any concern about affecting the genetics of the population by releasing crabs in areas different from the area of harvest, and the biomedical company would be free to import crabs from other states or purchase (rent) them from the bait companies, increasing their supply.

Our intention is to manage the horseshoe crab population as a renewable resource. Since the ASMFC plan is designed to accomplish that while considering the needs of all interested parties, compliance with the plan should be the basis for measuring our success. In the past year, DMF has been subjected to public criticism reacting to anecdotal – and unfounded – reports of local stock collapse and overfishing. However, a management plan based on the best available scientific information with mandatory compliance measures is the only reasonable response by government agencies.

DMF will continue to work with interested citizens and environmental organizations to continually refine the process. A bill filed by Mass. Audubon to further restrict crab harvest has been placed on hold by the Joint Committee on Natural Resources and Agriculture of the Massachusetts General Court. DMF and Mass Audubon will hold a joint workshop in November to review new information and discuss management options. For more details on the plan, regulations or the upcoming workshop, contact DMF's Frank Germano for details at 508 563-1779 ext 123.

*by Jim Fair, Assistant Director*

## New sport fishing piers on Wareham River

On July 14, state and local officials gathered with area anglers to announce the opening of two adjacent sport fish piers on the Wareham River at Besse Park in Wareham. The Public Access Board of the state Department of Fisheries, Wildlife & Environmental Law Enforcement (DFWELE) managed construction of the \$175,000 facility, which was paid for with federal funds through DMF's Sport Fish Program.

"This facility provides great shore fishing access to part of the Wareham River that is known for exceptional fishing," said DFWELE Commissioner David Peters. "I would like to thank Senator Murray and Representative Provost for their support of this project, and I would also like to recognize the town of Wareham, the Division of Marine Fisheries, the U.S. Fish & Wildlife Service, the state Office of Disabilities, and 'MassHighways' for their help on this project."

The sport fish pier facility includes parking for several vehicles and two 50-foot long handicapped accessible fishing platforms open free of charge to the public. The town of Wareham will oversee the day to day operations of the facility.

"This is a great day for all people in Buzzards Bay who have found it difficult to find good fishing areas along the coast," said state Senator Therese Murray (D-Plymouth). "The partnership of state agencies, the town of Wareham, and funding from the federal government all contributed to the success of this project."

"I am happy to be here today to celebrate the completion of these sport fishing piers, which I know will be very

popular among anglers," said Representative Ruth Provost (D-Sandwich). "I know that Plymouth County Sheriff Charlie Decas played an important role in getting this project off the ground when he was a state representative, and I would like to thank him along with the Public Access Board for providing us with this beautiful facility."

The Wareham River is well known for providing good fishing for a variety of species, including tautog, striped bass, bluefish, scup, and fluke. The access facility was paid for by a reimbursement from the U.S. Fish & Wildlife Service through the federal Sport Fish Restoration Act, which provides funds from federal taxes on sport fishing equipment and gasoline taxes paid by boaters. The reimbursement came through DMF which applied for a grant to the USFWS for the project. DMF's Sport Fish Program has made recreational fishing access to coastal waters a top priority.

The state Public Access Board, which oversees over 200 boat and fishing access facilities in the Commonwealth, managed construction of the project, and the town of Wareham was very helpful through the cooperation of its Town Manager, office of Disabilities, Department of Public Works, and Harbormaster. MassHighways assisted through the donation of the pile system from the old Route 6 bridge. Other partners in the design and construction of the project include the state Office of Disabilities, Braman Engineering, and Reagan Construction Company.

*By Bob Greco, Dept. Information Officer*



## DMF has arrived!

DMF's Boston staff reunited at 251 Causeway Street, 4<sup>th</sup> floor at the beginning of October. All correspondence should be directed to the new address. DMF's licensing staff is scheduled to move from 175 Portland Street to 251 Causeway Street within the next two months. DMF's new site is about a fifteen-minute walk from the Saltonstall Building, where we were located for 35 years.

251 Causeway Street is located at the corner of Causeway and North Washington Streets, at the gateway to the North End of Boston. It is accessible by several modes of public transportation. Call DMF's main number (617) 626-1520 for more information.

### Main Office:

Division of Marine Fisheries  
251 Causeway Street, Suite 400  
Boston, MA 02114  
(617) 626-1520, fax: (617) 626-1509

*Photo by Dan McKiernan*

*EOEA agencies reunited at 251 Causeway Street (below).*



## Shellfish Biologist Lynn Sherwood leaves DMF for teaching career

DMF's loss will be Yarmouth middle-schoolers gain. The popular and well-respected Lynn Sherwood resigned from DMF this past summer after 12 productive years on DMF's Shellfish Program. Since 1988 when DMF's Shellfish Monitoring Program was expanded (and taken over from the Department of Environmental Quality Engineering) Lynn served the Commonwealth as a Shellfish Area Biologist overseeing the towns of Yarmouth, Dennis, Harwich, Chatham, Orleans, and W. Tisbury.

Lynn's most notable accomplishment was the creation and oversight of the Mass. Phytoplankton Monitoring Program. The Program employs volunteer samplers throughout the state, and serves as an "early warning system" for certain bio-toxins that accumulate in shellfish and that force DMF to close shellfish beds.

Lynn's colleagues will miss her for her good nature, strong work ethic and cooperative spirit. Always willing to chip-in to help DMF meet its goals, Lynn was a regular participant on the inshore trawl survey, and even participated as an aerial observer in the right whale monitoring program. She enjoyed working with school groups and the general public to share her appreciation for the marine environment and conservation. We wish her well in her new endeavor.

*Photo by Arnold Howe*



## Annual Right Whale Surveillance and Monitoring Report for 2000 released

DMF and the Center for Coastal Studies are readying for the fourth annual program in Cape Cod Bay this winter. Last winter was the third consecutive successful year of monitoring the most endangered large whale in the world right off our beaches. CCS has submitted its third annual report to DMF and the results are both impressive and fascinating.

During the past three years the winter/early spring program has identified 143 different right whales in Cape Cod Bay. Of these 143 whales, 27 (19%) have been seen in each of the three years. Last winter 86 different whales were identified. In 2000, whales arrived later than in the previous years, the first whale was not sighted in the bay until January 20 and the "herd" departed abruptly around April 11. Peak sightings occurred between late February and late March.

The study of right whales involves individual identification in various habitats throughout the Atlantic. Two whales seen this past winter reveal their incredible mobility.

RW # 2010, an adult male was seen on January 12 off Florida and ten days later was seen in Cape Cod Bay. This is the fastest documented migration between these two critical habitats. But it gets more interesting. He returned to the SE US and was seen 23 days later off Georgia on February 16! Then was re-sighted again in Cape Cod Bay on March 23.

RW #1133, another adult male was re-sighted in the bay on March 2 and 5<sup>th</sup>. This whale's global travels amazed researchers last year when it was photographed east of Nantucket in the Great South Channel in May and then across the Atlantic in northern Norway – above the Arctic Circle - in September.

These two cases are sobering reminders that right whale protection is not just a state challenge but a national - and international issue!

To see the annual right whale reports, visit DMF's web site:

[http://www.state.ma.us/dfwele/dpt\\_toc.htm](http://www.state.ma.us/dfwele/dpt_toc.htm)

## **Notice of Public Hearings**

**Scheduled for November 8, 9, & 10, 2000**

Under the provisions of G.L. Ch. 30A and pursuant to the authority found in G.L. Ch. 130 ss. 17A, 80, 100A, and 104, the Division of Marine Fisheries (DMF) and the Marine Fisheries Commission (MFC) have scheduled hearings on the following proposals. Contact the Division of Marine Fisheries for draft regulations and further details.

(1) DMF proposals to amend striped bass regulations (322 CMR 6.07) by (A) eliminating the requirement that all wholesale dealers affix tags to each fish; and (B) lowering the striped bass recreational size limit from 30 inches to 28 inches consistent with the interstate management plan.

(2) DMF proposal to amend the commercial seasonal possession limits for scup and black sea bass (322 CMR 6.28) consistent with the interstate management plan.

(3) DMF proposal to reduce scup recreational bag limit (322 CMR 8.06) from the current 50 fish/angler and 200/vessel to 25/angler and 100/vessel.

(4) DMF proposal to extend the current seasonal commercial groundfish closure to include (322 CMR 8.12) January in upper Cape Cod Bay and Massachusetts Bay that is in effect during October-November and February-April.

(5) DMF proposals to amend right whale regulations (322 CMR 12.00) to further restrict fixed gear fishing in Cape Cod Bay Critical Habitat during the winter/early spring months when right whales are expected.

(6) Accept public comment on recent emergency action (322 CMR 8.12) that prohibited the fishing, setting, storing, or abandoning of lobster traps in a portion of the upper Cape Cod Whiting Area during October.

### **Three hearings have been scheduled:**

- ❖ Wednesday, 11/8/2000 at the Fuller School, Gloucester 6:00 – 9:00 P.M.
- ❖ Thursday, 11/9/2000 at the Mass. Maritime Academy in Buzzards Bay,  
6:00 – 9:00 P.M.
- ❖ Friday, 11/10/ 2000 at the Katherine Cornell Theater, Tisbury Town Hall  
(Martha's Vineyard), 2:00 – 5:00 P.M.

# Regulatory Update

*During the period June through October, the following actions were taken by DMF and the Marine Fisheries Commission.*

## **Striped Bass “high-grading” prohibited beginning in 2001**

High-grading means the discarding of a smaller legal-sized fish previously captured and retained in favor of another larger legal-sized fish.

The problem of high-grading is exacerbated by the state’s 1-fish bag limit. All jurisdictions south of Massachusetts allow 2 fish per angler except New York where only party/charter boat customers are allowed a second bass.

High-grading is especially prevalent during fishing tournaments and Environmental Police have reported problems in the Cape Cod Canal where anglers have been observed keeping fish on a stringer. The Department received complaints from anglers who complained about inconsistent enforcement of the bag limit.

The new regulation prohibits recreational fishermen from keeping striped bass alive in the water by attaching a line or chain to the fish or placing the fish in a live-well or holding car. Any legal-sized fish not immediately released into the water and held by stringer, live-well or another means shall be considered intent to high-grade. Current regulation already prohibits discarding dead legal-sized bass.

## **Urchin Drag Season Changed**

The open season for taking green sea urchins with mobile gear was changed from October through January to November through February. This decision to shift the 4-month season was made to reduce the impacts to local lobster fisheries, especially in the areas of Salem and Marblehead Harbors where active lobster fisheries and urchin draggers have vied for limited fishing areas. In 1999, DMF postponed the urchin drag opening until November 1 after receiving reports of molting and new-shelled lobsters in the prime urchin areas during late September and October. To mitigate the impacts on the urchin draggers, the drag



season was extended for one month to include the month of February.

DMF and MFC carefully considered the public hearing comments from August and tried to achieve a compromise between a growing number of fishermen who favor no dredging at all with those who favor continued urchin

fishing in the face of severe restrictions on finfish trawling. DMF intends to dedicate some resources to monitor and evaluate this fishery during the open season to begin to answer the concerns which have been raised over potential habitat and resource damage.

Regulations pertaining to SCUBA divers remain unchanged with an 8-month open season from September 1 through April 30.

## **October-November Seasonal Groundfish Closure Enacted**

An extension of the seasonal groundfish closure was enacted to complement existing federal rules. Commercial fishing with bottom trawls, gillnets, longline, rod-and-reel, or handline is prohibited during October 1 - November 30 in an area that extends north of 42 degrees latitude (off Plymouth) to 42 degrees 30 minutes latitude (off Marblehead). This action complements federal Gulf of Maine Rolling Closure V. This state action impacts commercial fishermen who have only state permits -vessels with federal permits are already prohibited from fishing in these and adjacent federal waters during these two months. For 2001, DMF proposes to extend this closure again to include January to complement the imminent federal closure because the current years cod landing targets have been exceeded. See public hearing notice.

## **Upper Cape Cod Bay Whiting Area Approved**

Based on the joint state/federal experimental fisheries programs during 1995-99, a small mesh fishery exemption area was established for trawlers fishing for whiting in upper Cape Cod Bay, during September 1 – November 20. This area is opened during the two-month groundfish closure exclusively to vessels using the DMF and industry developed raised-footrope trawl. Gear specifications, catch and by-catch restrictions are similar to those in effect during 1996-99 when DMF conducted experimental fisheries in this area and similar to those approved by the New England Council as Framework #35. When fishing for whiting with small-mesh nets, possession of many species captured as by-catch is prohibited including lobster and all regulated groundfish (cod, pollock, haddock, redfish, white hake, flounders).



*DMF file photos.*

# DMF goes High-Tech:

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**join-marinefisheries@listserv.state.ma.us** with nothing in the subject or body.

To be removed, send an email to:

**leave-marinefisheries@listserv.state.ma.us**

### ***Lobster gear banned in portion of draggers' whiting area***

Because some lobstermen did not comply with the Cape Cod Bay Whiting Area Access Agreement, DMF decided to take emergency action to close a portion of the Whiting Area to lobstering from **October 1 through October 31**. In prior years, DMF brokered a "gentlemen's agreement" between lobstermen and draggers to keep a portion of the area free of fixed gear. Draggers have complained that there has been a steady increase in lobster traps in the deep waters of Cape Cod Bay in the draggers' traditional fishing areas. Since 1997 the agreements had been successful. Cooperation between fishermen had enabled them to avoid regulation and to voluntarily share Cape Cod Bay in September and October with hardly any conflict. However, some lobstermen refused to abide by the agreement and have forced DMF to implement an emergency regulation to prevent these lobstermen from continuing their movement of gear from west to east in the bay. DMF concluded that encroaching lobster gear on the few fishing areas left for whiting fishermen in the bay had to be stopped during October when whiting catches and fleet effort are expected to peak. Groundfish closed areas in upper Cape Cod Bay and Massachusetts Bay have prevented draggers from fishing in adjacent waters and have made them unusually dependent on the Whiting Area.

### ***New sea herring spawning rules adopted to comply with the interstate/federal sea herring management plan***

New spawning closure rules, regional quota monitoring, and reporting requirements were enacted. Also DMF enacted no-fishing days in management Area 1A (western Gulf of Maine) to prevent a premature reaching of the annual quota from this area.

### ***NMFS and the regional fishery management councils recent actions that will impact our local fisheries***

**Black Sea Bass:** The Mid-Atlantic Council voted to establish possession limits as follows: 1st quarter - 9,000 lbs; 2nd - 1,500 lbs; 3rd - 1,000 lbs; 4th - 2,000 lbs. The Atlantic States Marine Commission (and Massachusetts) is expected to take emergency action to establish trigger levels in each of the four quarters to reduce the possession limit in half when 50 percent of the quota is projected to be reached.

**Scup:** In the scup fishery, the Council and Board voted to establish possession limits as follows: Winter I - 10,000 lbs with the exception that when 75 percent of the quota is projected to be landed, the possession limit be dropped to 1,000 lbs; Winter II - 2,000 lbs. The Commission will take emergency action for the Winter II fishery effective November 1, 2000 that will adopt a 500 lb possession limit. This emergency action includes a provision that drops the possession limit to 200 lbs when 50 percent of the quota for the Winter II 2000 season is projected to be taken. The Council and Board voted to increase the threshold triggering use of 4.5 inch netting in the winter fisheries to 500 lbs. while maintaining the summer fishery threshold at 100 lbs.

**Squid:** The Mid Atlantic Council approved a prohibition on vessels landing more than the trip limit specified during any single day. This will affect trawlers fishing nearshore during late April. Last year the federal possession limit before May 1 was 2,500 lbs. and trawlers were allowed to make multiple trips per day, but will be limited to a single the 2,500 lb. trip limit in any one day.

**Groundfish:** NMFS closed the groundfish fishery for this upcoming January in upper Mass. Bay and Cape Cod Bay encompassing Stellwagen Bank. This action was triggered by cod catch levels being exceeded during this past spring and summer. DMF intends to complement this action with a rule that affects state-only permit holders.

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## Surfers • Surfers • Surfers

This Newsletter and Other  
Information is available  
at our Web Site!

[http://www.state.ma.us/dfwele/dpt\\_toc.htm](http://www.state.ma.us/dfwele/dpt_toc.htm)

## DMF NEWS

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DMF receives state and federal funds to conduct research, management and development of the Commonwealth's marine fishery resources. Information in this publication is available in alternative formats.

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